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Pro Ser Glu Val Phe Arg Thr Asp Leu Ile Thr Ala Met Lys Ile Pro

300

295

310 Ser Arg Trp Ala Leu Ser Cys Ser Leu Cys Lys Glu Cys Thr Gly Thr 325 Cys Ile Gln Cys Ser Met Pro Ser Cys Val Thr Ala Phe His Val Thr 340 345 Cys Ala Phe Asp His Gly Leu Glu Met Arg Thr Ile Leu Ala Asp Asn 355 Asp Glu Val Lys Phe Lys Ser Phe Cys Gln Glu His Ser Asp Gly Gly 375 Pro Arg Asn Glu Pro Thr Ser Glu Pro Thr Glu Pro Ser Gln Ala Gly 390 395 Glu Asp Leu Glu Lys Val Thr Leu Arg Lys Gln Arg Leu Gln Gln Leu 405 Glu Glu Asp Phe Tyr Glu Leu Val Glu Pro Ala Glu Val Ala Glu Arg 420 Leu Asp Leu Ala Glu Ala Leu Val Asp Phe Ile Tyr Gln Tyr Trp Lys 435 440 Leu Lys Arg Lys Ala Asn Ala Asn Gln Pro Leu Leu Thr Pro Lys Thr 450 455 Asp Glu Val Asp Asn Leu Ala Gln Gln Glu Gln Asp Val Leu Tyr Arg

Cys Pro Glu Lys Met Glu Pro Ile Thr Lys Ile Ser His Ile Pro Ala

Arg Leu Lys Leu Phe Thr His Leu Arg Gln Asp Leu Glu Arg Val Arg

470

485

465

Asn Leu Cys Tyr Met Val Thr Arg Arg Glu Arg Thr Lys His Ala Ile 500 505 510

Cys Lys Leu Gln Glu Gln Ile Phe His Leu Gln Met Lys Leu Ile Glu 515 520 525

Gln Asp Leu Cys Arg Glu Arg Ser Gly Arg Arg Ala Lys Gly Lys Lys 530 540

Ser Asp Ser Lys Arg Lys Gly Cys Glu Gly Ser Lys Gly Ser Thr Glu 545 550 555 560

Lys Lys Glu Lys Val Lys Ala Gly Pro Asp Ser Val Leu Gly Gln Leu 565 570 575

Ala Gly Leu Ser Thr Ser Phe Pro Ile Asp Gly Thr Phe Phe Asn Ser 580 585 590

Trp Leu Ala Gln Ser Val Gln Ile Thr Ala Glu Asn Met Ala Met Ser 595 600 605

Glu Trp Pro Leu Asn Asn Gly His Arg Glu Asp Pro Ala Pro Gly Leu 610 620

Leu Ser Glu Glu Leu Leu Gln Asp Glu Glu Thr Leu Leu Ser Phe Met 625 630 635 640

Arg Asp Pro Ser Leu Arg Pro Gly Asp Pro Ala Arg Lys Ala Arg Gly
645 650 655

Arg Thr Arg Leu Pro Ala Lys Lys Pro Pro Pro Pro Pro Pro Gln 660 665 670

Asp Gly Pro Gly Ser Arg Thr Thr Pro Asp Lys Ala Pro Lys Lys Thr 675 680 685

Trp Gly Gln Asp Ala Gly Ser Gly Lys Gly Gln Gly Pro Pro Thr 690 695 700

Arg Lys Pro Pro Arg Arg Thr Ser Ser His Leu Pro Ser Ser Pro Ala 705 710 715 720

Ala Gly Asp Cys Pro Ile Leu Ala Thr Pro Glu Ser Pro Pro Pro Leu 725 730 735

Ala Pro Glu Thr Pro Asp Glu Ala Ala Ser Val Ala Ala Asp Ser Asp
740 745 750

Val Gln Val Pro Gly Pro Ala Ala Ser Pro Lys Pro Leu Gly Arg Leu 755 760 765

Arg Pro Pro Arg Glu Ser Lys Val Thr Arg Arg Leu Pro Gly Ala Arg 770 780

Pro Asp Ala Gly Met Gly Pro Pro Ser Ala Val Ala Glu Arg Pro Lys 790

Val Ser Leu His Phe Asp Thr Glu Thr Asp Gly Tyr Phe Ser Asp Gly 805 810

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Pro Ser Glu Val Phe Arg Thr Asp Leu Ile Thr Ala Met Lys Ile Pro

Asp Ser Tyr Gln Leu Ser Pro Asp Asp Tyr Tyr Ile Leu Ala Asp Pro

Trp Arg Gln Glu Trp Glu Lys Gly Val Gln Val Pro Ala Gly Ala Glu

Ala Ile Pro Glu Pro Val Val Arg Ile Leu Pro Pro Leu Glu Gly Pro 105 100

Pro Ala Gln Ala Ser Pro Ser Ser Thr Met Leu Gly Glu Gly Ser Gln 115 120

130 135 Tyr Trp Leu Glu Leu Ile Asn Ser Glu Leu Lys Glu Met Glu Arg Pro 150 155 Glu Leu Asp Glu Leu Thr Leu Glu Arg Val Leu Glu Glu Leu Glu Thr 170 Leu Cys His Gln Asn Met Ala Arg Ala Ile Glu Thr Gln Glu Gly Leu 185 Gly Ile Glu Tyr Asp Glu Asp Val Val Cys Asp Val Cys Arg Ser Pro Glu Gly Glu Asp Gly Asn Glu Met Val Phe Cys Asp Lys Cys Asn Val 215 Cys Val His Gln Ala Cys Tyr Gly Ile Leu Lys Val Pro Thr Gly Ser Trp Leu Cys Arg Thr Cys Ala Leu Gly Val Gln Pro Lys Cys Leu Leu Cys Pro Lys Arg Gly Gly Ala Leu Lys Pro Thr Arg Ser Gly Thr Lys Trp Val His Val Ser Cys Ala Leu Trp Ile Pro Glu Val Ser Ile Gly 280 Cys Pro Glu Lys Met Glu Pro Ile Thr Lys Ile Ser His Ile Pro Ala 295 Ser Arg Trp Ala Leu Ser Cys Ser Leu Cys Lys Glu Cys Thr Gly Thr 310 315 Cys Ile Gln Cys Ser Met Pro Ser Cys Val Thr Ala Phe His Val Thr 325 330 Cys Ala Phe Asp His Gly Leu Glu Met Arg Thr Ile Leu Ala Asp Asn 345

Pro Asp Trp Pro Gly Gly Ser Arg Tyr Asp Leu Asp Glu Ile Asp Ala

Asp Glu Val Lys Phe Lys Ser Phe Cys Gln Glu His Ser Asp Gly Gly 355 360 365

Pro Arg Asn Glu Pro Thr Ser Glu Pro Thr Glu Pro Ser Gln Ala Gly 370 375 Glu Asp Leu Glu Lys Val Thr Leu Arg Lys Gln Arg Leu Gln Gln Leu 390 395 Glu Glu Asp Phe Tyr Glu Leu Val Glu Pro Ala Glu Val Ala Glu Arg 405 410 Leu Asp Leu Ala Glu Ala Leu Val Asp Phe Ile Tyr Gln Tyr Trp Lys 425 Leu Lys Arg Lys Ala Asn Ala Asn Gln Pro Leu Leu Thr Pro Lys Thr 435 440 Asp Glu Val Asp Asn Leu Ala Gln Gln Glu Gln Asp Val Leu Tyr Arg 455 Arg Leu Lys Leu Phe Thr His Leu Arg Gln Asp Leu Glu Arg Val Arg 475 470 Asn Leu Cys Tyr Met Val Thr Arg Arg Glu Arg Thr Lys His Ala Ile 490 485 Cys Lys Leu Gln Glu Gln Ile Phe His Leu Gln Met Lys Leu Ile Glu 505 Gln Asp Leu Cys Arg Glu Arg Ser Gly Arg Arg Ala Lys Gly Lys Lys 520 Ser Asp Ser Lys Arg Lys Gly Cys Glu Gly Ser Lys Gly Ser Thr Glu Lys Lys Glu Lys Val Lys Ala Gly Pro Asp Ser Val Leu Gly Gln Leu Ala Gly Leu Ser Thr Ser Phe Pro Ile Asp Gly Thr Phe Phe Asn Ser Trp Leu Ala Gln Ser Val Gln Ile Thr Ala Glu Asn Met Ala Met Ser 585 Glu Trp Pro Leu Asn Asn Gly His Arg Glu Asp Pro Ala Pro Gly Leu 600 605

Leu Ser Glu Glu Leu Leu Gln Asp Glu Glu Thr Leu Leu Ser Phe Met Arg Asp Pro Ser Leu Arg Pro Gly Asp Pro Ala Arg Lys Ala Arg Gly Arg Thr Arg Leu Pro Ala Lys Lys Pro Pro Pro Pro Pro Pro Gln 650 Asp Gly Pro Gly Ser Arg Thr Thr Pro Asp Lys Ala Pro Lys Lys Thr Trp Gly Gln Asp Ala Gly Ser Gly Lys Gly Gln Gly Pro Pro Thr Arg Lys Pro Pro Arg Arg Thr Ser Ser His Leu Pro Ser Ser Pro Ala Ala Gly Asp Cys Pro Ile Leu Ala Thr Pro Glu Ser Pro Pro Pro Leu Ala Pro Glu Thr Pro Asp Glu Ala Ala Ser Val Ala Ala Asp Ser Asp Val Gln Val Pro Gly Pro Ala Ala Ser Pro Lys Pro Leu Gly Arg Leu 745 Arg Pro Pro Arg Glu Ser Lys Val Thr Arg Arg Leu Pro Gly Ala Arg 760 Pro Asp Ala Gly Met Gly Pro Pro Ser Ala Val Ala Glu Arg Pro Lys 775 Val Ser Leu His Phe Asp Thr Glu Thr Asp Gly Tyr Phe Ser Asp Gly 790 795 Glu Met Ser Asp Ser Asp Val Glu Ala Glu Asp Gly Gly Val Gln Arg

Ala Ser

805

820

810

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